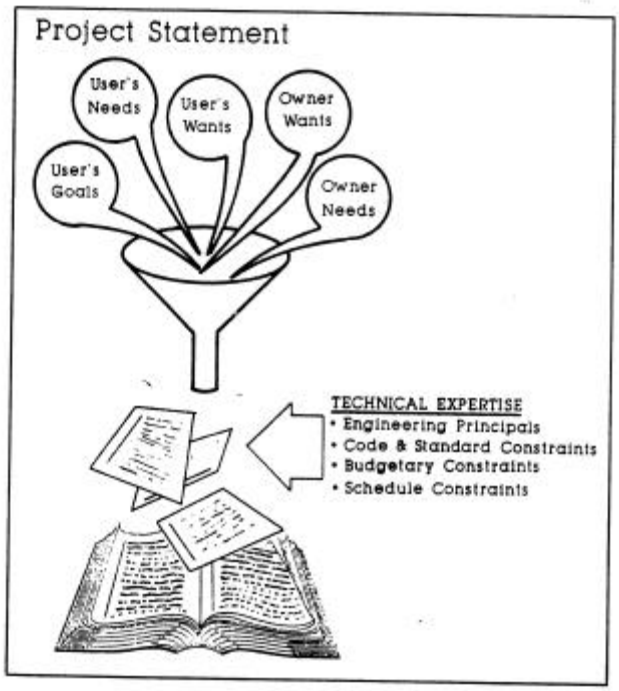
To help ensure that the facility you get meets your county's needs, wants and budget, you need a clear, concise, complete description of what it will be. In this Handbook, this description is called a Project Statement (PS), but it has other names. The State and some counties call such a document a Project Planning Guide. **Regardless of what you choose to call it, you need to develop a document that clarifies and defines your project in basic terms before you begin architectural programming or design.**

The Project Statement is a bridge from needs assessment and master planning to architectural programming. It spells out this one specific project, documenting the scope of work, the cost of the project and the schedule to be met.

Definition of the project scope is essential if the programmers are to plan and the architect is to design facilities that owners and users really want and need. The project statement must be accompanied by as accurate an estimate of project costs as possible. The estimate establishes a level of expectation for the quantity, quality and security aspects of the facility. The schedule is the plan that tells you when and how you're going to get where you're going. Later, the project statement will serve as a base point to ensure that the architectural program and design taking shape follow what the team agreed to from

the outset. The project statement represents the starting point from which decisions are made.

Get involved now. Don't let it be done for you and then pay to fix it later. When you walk into your new facility for the first time, you should know if you've achieved what you set out to by thinking back to this point.



Purposes

A a consensus on your project has been reached the county spends time and money to flesh it out through programming and design. To produce this document, the scope of this project must prove to be something that your Project Team, consultants, Board of Supervisors and the Board of Corrections feel is consistent with what the county can afford initially and over the long run. If is isn't, the scope can be modified or the project divided into phases. Finally, the PS can clarify strategies to get your project built on time and within budget. All of these are defined in the final document, but the exercise you must go through to draft it and have it approved is what makes the project statement particularly valuable as a planning tool.

CONTENTS

Project Scope

The project statement provides your first complete clear definition of project scope, addressing the needs and objectives to be met by this project. The wants to be met, should the budget allow, are easiest to handle later if they are prioritized at this stage.

The document explores how county philosophies will be incorporated in the physical structure. It defines the populations to be served, the numbers of each inmate category to be accommodated. The project statement also identifies the major operational approaches, such as direct or indirect surveillance, and delivery of services to inmates or transportation of inmates to services. It provides the first estimate of project square footage and cost requirements.

Site Criteria

No site yet? Then your project statement should contain site criteria. Based on input from the Project Team and the decision-makers, site criteria should include location/proximity, size, accessibility, compatibility and expandability. Include site acquisition and development costs since site costs can be the most variable cost component, amounting to more than 10 percent of the budget. When a budget problem is encountered, square footages, materials, hardware and building systems can be changed.

Site acquisition costs are generally fixed - they can run the gamut. Be aware that a sizable portion of funds designated for your facility could end up hidden in the ground. Be aware of costs - both for initial cost and staffing - associated with building configuration, unit/pod capacity, and low-rise versus high-rise design.

Evaluate several sites prior to establishing a budget. First determine the associated costs of the site most likely to be used. Generally, the site with the lowest cost will have the greatest chance of being selected (especially if it is the lowest for both short and long term).

The expense of making each site accessible and buildable should be figured in with its price tag. **However, due to the political nature of siting make sure that the budget provides for not less than the site with the second lowest cost.**

If you already have a site, the project statement should include a description and assessment of the site. (Has an Environmental Impact Report been developed? Proximity to other detention facilities, courts and justice departments, size, location; access, and known constraints should be included. Can the facility handle future expansion needs.

Remember to include indirect site costs too - those arising from transportation of inmates between the facility and the courts. Assumptions about transportation should be closely examined; locating a jail/hall in close

proximity to courts (but not physically connected) does not necessarily reduce transportation costs.

Also, consider the cost in time of police, public defenders and others to work at the site. The report also should evaluate requirements and/or assumptions for site grading, site demolition, soil and sub-soil conditions, and drainage. Availability and cost of existing and future on and off-site (water, sewer, gas, electric, etc.) utilities must be addressed, as should fees and permits.

Outline Program

For the project statement develop a preliminary or outline program. The detail included will vary substantially depending on the size of the project, resources devoted to development of the project statement and available information on what kinds of spaces you plan to build.

The outline program should be consistent with decisions made during master planning. For example, for efficiency your county may have decided that the new jail will provide all laundry services to all county institutions and that intake/release will be centralized at the older main jail. Your brief description, therefore, would include a laundry sized for a much larger population than is to be housed at the new project. The estimate also would contain only minimal intake/release (holding) space. In your project statement, you should assign a space estimate for each component you intend to include in your new facility. Although not all detention facilities have all of following components and some jails have additional components (such as courts), the following list represents spaces typically found in a jail:

Common Detention Facilities Components

1. Administrative and Staff Areas
2. Public Areas
3. Visiting
4. Central Control
5. Maintenance/Utility
6. Food Service
7. Laundry
8. Intake/Release
9. Medical
10. Inmate Programs/School/Industries
11. Housing/Dayroom
12. Indoor Exercise
13. Quasi Outdoor Exercise
14. Outdoor Exercise
15. Circulation
16. Future Space

17. Indoor Parking
18. Courtyard
19. Dining area
20. Counseling

The Board of Corrections can provide a range of sizes for many of the above areas based on California jails constructed between 1985-1995.

Although briefly describing functional components, such as food services, and estimating areas may seem premature, if you have a budget you must stick to, this is a crucial exercise before beginning the programming process.

This definition will help tell you how your needs and wants line up against your budget before you go on to the more time consuming task of developing an architectural program. If you skip this step, you may find yourself over budget and-behind schedule at the end of programming because you cannot afford the building programmed. Reassessment means a giant step backward.

The outline program should contain such basic descriptions as: "The project will contain administrative space which will serve the new facility only. Based on statewide averages for jails of a similar size, administration will encompass approximately 900 net square feet (NSF)." If you've already decided on the exact number of staff and spaces for administration, these details can be listed as well.

In either case, the budget will be based on more information than a simple estimate of the size of the facility. Undoubtedly some of the assumptions in the project statement will change as the project unfolds. At least you will know what assumptions were used to come up with the original budget and what parameters are realistic during programming.

In addition to the above information which will help project construction costs, you also must identify any other costs which you plan to include in your project budget. Perhaps the most important part of preparing any budget is making sure everything is accounted for when you start (10 to 30 percent of your initial project costs will not be construction dollars). In addition to the base construction dollars, you should account for the following costs:

Consulting fees. You need to budget amounts now for all of the consultants you plan to use. If the money is not budgeted for a consultant upfront, it may become

difficult to allocate dollar resources for that position later. Although the amount paid for consulting services can vary substantially, depending on the scope of services needed, research into what your county and others have paid should give you a range of values on which to base your budget. Consultants you may want to consider are discussed in more detail in Section II.C, Establishing Your Team.

Testing and Inspection services. During construction, work needs to be tested (soils, concrete, welding, etc.) and inspected to ensure it is completed according to your contracts. Budget enough money to ensure you get what you pay for on bid day. **A lax inspection program may result in many substitutions by the contractors of lower quality materials and methods.**

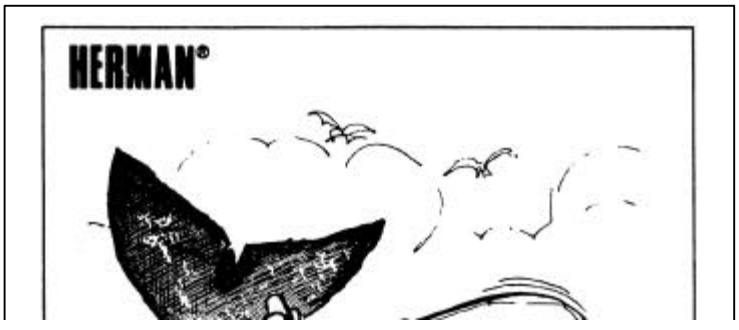
Utility connection fees. Your site analysis should have identified what utilities are available to the site and what costs, if any, will be necessary to tie into the utility system. Negotiating utility connection fees can be very time-consuming and should be done early in the planning process.

Off-site improvements. If you need any road improvements, such as turning lanes, determine whether these costs will be part of your construction budget.

Equipment. Budget for movable and fixed equipment. Clearly define what categories of equipment will be included in your construction costs and what will be procured elsewhere. Confusion about what equipment is being provided by what source is quite common, usually because the issue was not addressed early enough in the project.

Communication Systems. Plan and budget for telephones, intercoms, personal alarms, closed circuit television (CCTV), and other communication systems.

Site acquisition/easements. If your county requires a new site, acreage adjacent to an existing site or easements, these costs must be identified.



Reproductions. Although not a significant percentage of your entire project budget, a substantial number of reproductions will be necessary for the construction project. Identify that cost now.

Management costs. If you plan to pay for any additional county staff time out of your project budget, you should identify this cost now.

Outline Specifications

Some counties may wish to describe the basic systems, materials and equipment selected in the design-to-cost model to improve the likelihood of a solid cost estimate. Included in the outline specification are the associated building materials for different levels of security. It describes the type of glazing, doors and hardware, furnishings, partitions, floor and ceiling types and finishes for non-security areas and the different levels of security areas.

Outline specifications also should contain all decisions regarding cell/rooms. For instance, is the furniture to be movable or floor or wall-mounted? Remember that a $100 change to a cell in a 500-cell jail will change the bottom line by $50,000.

Schedule

Your schedule impacts costs too. A schedule must be realistic and incorporate adequate design review time. A schedule that takes too long can cost money, a schedule which is accelerated can be equally expensive because it places greater demands and constraints on contractors and consultants. Consultants' fees, design errors and contractor overhead are directly related to schedule.

Scheduling encompasses much more than the construction process. Your project schedule should detail what you must do to get to construction. Design time, approvals, funding, etc. can be much more difficult than the actual construction process, and time required for these activities is often underestimated. Again, don't shortchange planning and design time or you may regret it later.

If your schedule is an especially tight one, it would be smart to get a second opinion to verify that your schedule is feasible. This outside verification should come from an independent expert, not from your construction manager.

Missing a step in the process can add time or reduce time allotted for other activities, thereby increasing cost. These are costs which a cost analyst may not be able to estimate but which can affect your budget substantially.

Bidding strategies have a significant impact on cost and time, so these decisions need to be considered. A complete discussion of fast track, design-build, phased construction, trade contracting, prepurchase, and owner-furnish methods is covered in Section III.H, Construction. If you need your jail in a hurry, make sure you include the acceleration cost in your budget.

DESIGN-TO-COST MODEL

Based on the site, the outline program, the previously addressed objectives and philosophies, and the project schedule, a realistic project budget can now be established. Major life-cycle costs also can be projected.

The benefits reaped by making this extra effort before programming include:

- **First and most important,** you now have a budget established on certain parameters. When it becomes necessary to deviate from these parameters, you can make informed decisions relative to the overall goals established in the project statement,

- **Second,** you will have a basis for the cost assumptions being made. If and when there are changes, you will be able to provide accountability for those changes.

- **Third,** you have a system for tracking your project from this point on and for making decisions which fit into your budget.

Preliminary Budgeting

With the information you have assembled on anticipated site costs, outline programming and schedule

assumptions, you can now begin the process of establishing your original budget.

Construction costs can consist of cost of sitework, cost of the building and possibly costs of infrastructure off your site to service the new facility. A conceptual estimate should project costs for these items based upon similar projects recently constructed and whatever level of project detail you have at this point in time.

Your outline program should provide a basis for projecting the cost of your building. Values should be assigned for each square foot of space in each category of your outline program to arrive at the cost of the building. Depending on the complexity of your project and the sophistication of your cost projecting, you may simply have one value per square foot for the entire building, such as:

125,000 GSF x $150/GSF (construction cost)	$18.75 million

Or, you may identify separate unit costs for each space, such as:

Administration	20,000 GSF x	$ 95 =	$1,900,000
Public Areas	5,000 GSF x	$125 =	625,000
Visiting	18,000 GSF x	$140 =	2,520,000
Central Control	800 GSF x	$350 =	280,000
TOTAL			$5,325,000

(NOTE: The above construction costs are examples only).

How the dollar values for either level of detail are developed will once again be dependent on project complexity, resources expended and level of sophistication. At a sophisticated level, it is possible through computer modeling techniques (based on historical data from other projects) to project costs for a facility down to how many doorknobs will be in the facility. At a medium level of sophistication, the costs may be based on assumptions about what major building methods will be used for structural, security and mechanical systems and what level of quality expectation is desired. At the simplest level, the overall square foot cost of the project may be based on another similar project.

Whatever level of sophistication or detail is used at this point, the cost analysis should be performed by someone

with experience in budgeting correctional facilities and at least some expectations for the finished product should be established (will it be a downtown showcase or a bare bones facility hidden away in a corner of the county).

Contingencies And Assumptions of Cost Model

At some point during the project, it will be necessary to develop back-up figures depicting how the building or site will be constructed to meet the dollar per square foot figures projected in your early budget. This is the next step in continuing the design-to-cost model process. If the cost analysis developed, for your project statement is an in-depth study and the parties responsible for developing the project statement budget have experience and the data bases for budgeting correctional facilities, it may be possible to project costs for the building systems which make up the total project at the project statement level. If the project statement budget is based on simple dollars per square foot for the entire building or for the various functional use areas, then determination of costs for building systems should be completed no later than the schematic design phase.

The Value Matrix section of this Handbook describes the project's systems. Developing the costs for each system as early as possible will enable tracking of the project for each system. It will provide budget parameters for designers in every discipline. Use of the building system cost model is absolutely essential for control of the design of each system. All parties involved - the architect, the civil engineer, the structural engineer, the mechanical engineer, the electrical engineer and the security/communications consultant - know what part of the dollar pie their work must come from. Without this control and the communication of budget parameters to these designers, it is impossible to have an end-cost which will meet the budget.

Breaking down a project early on into costs for each building system will not be 100 percent accurate for each system. There must be give and take between the systems to equal the bottom line. The original assumption for the mechanical system may be low. But when you discover that the allotted amount may not be enough, you can do something to compensate.

Either the mechanical system will have to offset the cost, or the estimating contingency may accommodate the increase. If no one knows the parameters of their responsibilities, no one can control the project budget.

Once this base cost is established for construction based on historical costs of other similar facilities, the construction budget should take into account the following:

Estimating contingencies. An early conceptual budget is going to be based on many assumptions; therefore, an estimating contingency ranging from 5 to 20 percent should be included depending on how much is known about the project at this time. This contingency may be built into the unit costs or listed as a line item. (it is usually more useful to list contingency as a separate line item so one knows where it is and what it is.)

Schedule Impact. Make assumptions about how fast or slow you plan to build the project and document these assumptions. Suppose your original budget was based on a normal design and construction schedule with construction starting in the spring after the winter rains one year from now, but the project is delayed two years. You are making up for the delays with accelerated design and construction durations with construction starting at the beginning of the rainy season. Your original budget may be affected substantially. Document your original schedule assumptions and be aware when making schedule changes that schedule affects costs. If you use historical cost data from another project, make sure to include escalation cost in the data of your project. Record this assumption.

Construction contingencies. A construction contingency must be included in the budget to cover changes to the construction contract after the award of contracts. Typically, a 5 percent construction contingency is allocated for new construction projects, but a higher percentage is prudent for remodeling work and sometimes for fast-track contracting, depending on the complexity of the project.

Location factor. If you use cost data from another project, make sure to account for any cost differences between that project's and your location - primarily labor costs and availability of materials.

COST CONTROL REPORT

Once all of the pieces are pulled together, develop a cost control report which lists the components identified in the construction budget and other non-construction costs (see example on page 33). This information becomes the baseline against which the remainder of the project will be tracked. When designing the format of your cost control

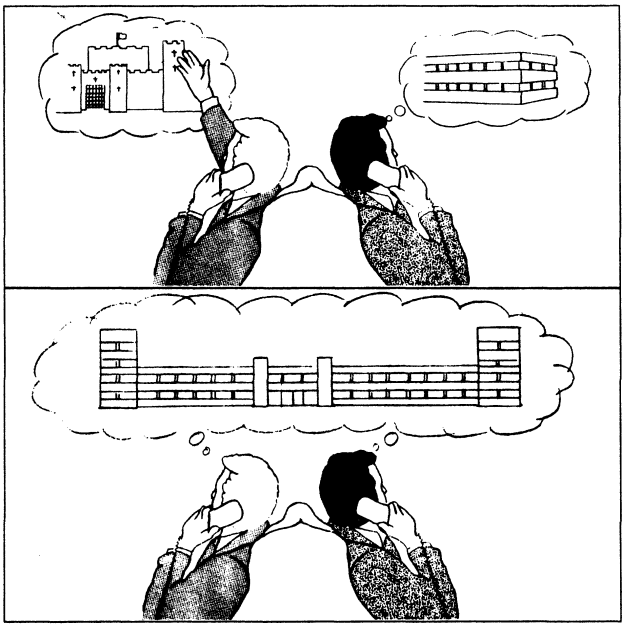
report, you might consider bidding strategies since the cost control report should reflect how you intend to "buy" your project. Pre-purchasing equipment and bid packages should be identifiable line items or subtotals within the report. (See Section III.H, Construction, for more details.)

As the design progresses, current estimates will be reported in a similar fashion in order to identify variances from the baseline. Variances should then undergo value analysis.

DEVELOPING A PROJECT STATEMENT

Unless your county has staff trained in planning, estimating the cost of, scheduling and building correctional facilities, a consulting firm should produce the project statement. Of course, the Project Team must be closely involved in determining the project scope, outline program, site, and budget and in reviewing all parts of the document as it develops, including alternative building systems and costs.

The Board of Supervisors must approve the entire document thereby buying into the project - once it has been accepted by the Project Team. Consensus is essential before moving to the next step, architectural programming. If your county cannot reach a consensus, the project statement should be revised. Changes made now are easier to implement and more cost efficient.



Reaching a consensus

In gathering material for the project statement, your staff and consultants should use the following methods:

- Extracting and expanding information from the needs assessment study and master plan.
- Listing assumptions that drive space requirements.
- Interviewing all decision-makers, including the Board of Supervisors.
- Interviewing and/or issuing questionnaires to those affected by the project, such as jail managers/hall superintendents/supervisors and staff.
- Visiting other detention facilities to identify features you like and dislike.
- Tapping space and cost resources/historical data such as that compiled by the Board of Corrections.
- Brainstorming with the committee.

PROJECT STATEMENT

(All answers must be "Yes" before you move on.)

1. Has the project been defined clearly?

Yes	No	Not Sure

2. Has a site been selected or site criteria been specified?

Yes	No	Not Sure

3. Has an outline program been developed?

Yes	No	Not Sure

4. Has a design-to-cost model been developed?

Yes	No	Not Sure

5. Has an estimate of all first costs that is compatible with the budget been completed?

Yes	No	Not Sure

6. Have you completed an estimate for life-cycle cost which indicates that your county can afford to operate the new facility?

Yes	No	Not Sure

7. Have all items to be covered by your project budget been included in that budget?

Yes	No	Not Sure

8. Has a project schedule been developed?

Yes	No	Not Sure

9. Have items 1 through 8 been approved by the Jail Project Team?

Yes	No	Not Sure

10. Have items 1 through 8 been approved by the Board of Supervisors?

Yes	No	Not Sure